



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,760	04/13/2006	Markus Klumpe	289246US0PCT	5123
22850 7590 10/09/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER KEYS, ROSALYND ANN				
ART UNIT		PAPER NUMBER		
1621				
NOTIFICATION DATE		DELIVERY MODE		
10/09/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/575,760

Applicant(s)

KLUMPE ET AL.

Examiner

Rosalynd Keys

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

1. Claims 1, 2 and 5-10 are pending.
Claims 1, 2 and 5-10 are rejected.
Claims 3 and 4 are canceled.

Response to Amendment/Arguments

*Rejection of claims 1, 2 and 5-10 under 35 U.S.C. 103(a) as being unpatentable over
Ruland et al. (WO 03/091190 A1, which is equivalent to US 2005/0170991 A1)*

2. The rejection of claims 1, 2 and 5-10 is withdrawn, due to the filing of the English language translation on September 22, 2009 together with a statement that the translation of the certified copy is accurate.
3. Prosecution on the merits of this application is reopened and the finality of claims 1,2 and 5-10 is withdrawn, since these claims are considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 2 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlgren et al. (WO 94/11331) in view of Dahlgren et al. (WO 94/11330) and further in view of Clement et al. (WO 01/04183 A1).

Dahlgren et al. '331 teach an alkoxylate mixture having the formula $C_5H_{11}CH(C_3H_7)CH_2O(C_2H_4O)_p(B)_rH$ wherein B is an alkyleneoxy group having 3-4 carbon atoms, p is 1-10 and r is 1-6 (see entire disclosure, in particular pages 1-3). The different alkyleneoxy groups may be added randomly or in block (see page 2, lines 5-7). The alkoxylates are prepared by reaction of 2-propyl heptanol with an alkylene oxide

using a conventional catalyst (see page 2, lines 22-35). The alkoxylates have use as a surface-active component in detergent compositions (see page 1, lines 3-33).

The alkoxylate mixture of Dahlgren et al. '331 differs from the instant alkoxylate mixture in that the alkoxylate mixture of the instant invention requires the C5H11 to be present with a specific structure and in specific proportions. One proportion requires C5H11 to be present as n-C5H11 with the other portion being present as $\text{C}_2\text{H}_5\text{CH}(\text{CH}_3)\text{CH}_2$ and/or $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2$.

It is well known that C5H11 usually occurs or is formed as a mixture of isomers. Thus, one having ordinary skill in the art at the time the invention was made would have a reasonable expectation that the C5H11 portion of the compounds of Dahlgren et al. '331 is also present as a mixture of isomers. Therefore, the mere selection of specific C5H11 isomers is obvious absent a showing of unexpected results.

The alkoxylate mixture of Dahlgren et al. '331 differs from the instant alkoxylate mixture in that Dahlgren et al. '331 do not teach that the ethyleneoxy groups and the propyleneoxy groups have to be arranged in blocks in a specific sequence. However, Dahlgren et al. '331 suggest such an arrangement, since Dahlgren et al. '331 teach that ethyleneoxy groups and the propyleneoxy groups can be arranged in block (see page 2, lines 5-7).

Dahlgren et al. '330 teach an alkoxylate mixture similar to the alkoxylate mixture of Dahlgren et al. '331 (see entire disclosure, in particular page 1, line 25 to page 2, line 10). Dahlgren et al. '330 teach that the hydrophobic properties of the hydrocarbon

chain have been enhanced by adding hydrophobic alkyleneoxy groups closest to the alcohol.

One having ordinary skill in the art at the time the invention was made would have been motivated to arrange the ethyleneoxy groups and the propyleneoxy groups of the alkoxylate mixture of Dahlgren et al. '331 in the manner taught by Dahlgren et al. '330, in order to enhance its hydrophobic properties.

The process of making the alkoxylate mixture of Dahlgren et al. '331 differs from the instant process in that Dahlgren et al. do teach utilizing conventional catalysts and not a dmc catalyst.

Clement et al. teach that a dmc catalyst can be used in place of a conventional catalyst for polymerization of alkylene oxides allowing one to obtain the polyethoxylated compounds in good yield (see entire disclosure, in particular pages 1-3).

One having ordinary skill in the art at the time the invention was made would have been motivated to utilize a dmc catalyst, as taught by Clement et al., in the process of Dahlgren et al. '331 as it would allow one to obtain the alkoxylate mixture in good yield.

Response to Arguments

8. In the office action, mailed July 14, 2008 the Examiner indicated that the Applicant's arguments filed April 3, 2008 were persuasive and thus the rejection was withdrawn. However, after further review the Examiner is reinstating this rejection for the following reasons:

The Applicants submitted that Dahlgren ('331) does not disclose or suggest blocks of 4 alkyleneoxy units in the specific order "(B)p(A)n(B)m(A)q" where p is 1 to 3.

This submission is not persuasive because Dahlgren ('331) disclose that the ethyleneoxy groups and the propyleneoxy groups can be arranged in block and Dahlgren et al. ('330) teach that the hydrophobic properties of the hydrocarbon chain have been enhanced by adding hydrophobic alkyleneoxy groups, i.e., the propyleneoxy group, closest to the alcohol. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to arrange the propyleneoxy groups and ethyleneoxy groups of the alkoxylate mixture of Dahlgren et al. '331, with the propyleneoxy groups closet to the alcohol, as taught by Dahlgren et al. '330, in order to enhance its hydrophobic properties. Further, both references disclose that the mixture can have from 1-10 ethyleneoxy groups and from 1-6 propyleneoxy groups and Dahlgren et al. ('331) teach that 50-100% of the all the alkyleneoxy groups are ethyleneoxy groups. Thus, based upon the combined teachings of Dahlgren et al. '331 and Dahlgren et al. '330 all the claimed elements are suggested.

The Applicants submitted that Clement does not disclose or suggest the alkoxylate mixture according to the claimed invention.

This submission is not persuasive because Clement was applied because it provides a reason for using a dmc catalyst in place of the alkali catalyst of Dahlgren et al. ('331).

The Examiner respectfully submits that a prima facie case of obviousness has been shown and that said prima facie case has not been overcome.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is (571)272-0639. The examiner can normally be reached on M-F 5:30 am-7:30 am and 9:15 am-3:15 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rosalynd Keys/
Primary Examiner, Art Unit 1621

October 5, 2009